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| 09/603,356 | 06/26/2000 | Ray C. H. Cheng | 77666-5 | 3257 |

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EXAMINER

EDELMAN, BRADLEY E

| ART UNIT | PAPER NUMBER |
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2153

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/603,356

Applicant(s)

CHENG ET AL.

Examiner

Bradley Edelman

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 August 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-35 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 18-23, 25, 27-30 and 35 is/are allowed.
- 6) ☒ Claim(s) 1-5, 7-11, 13-17, 24, 26 and 31-34 is/are rejected.
- 7) ☒ Claim(s) 6 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

PD

DETAILED ACTION

This Office action is in response to Applicant's request for reconsideration filed on August 16, 2004. Claims 1-35 are presented for further consideration. These are the original claims, which have not been amended. Because Examiner hereby presents new grounds for rejection, this action is non-final.

Response to Arguments

Applicant has argued that the Parker reference doesn't teach that the ticket is adapted to cause a message to be sent to the target application server, as claimed. Examiner realizes that the Parker reference does not explicitly state such a step, but still believes that Parker inherently includes such a function. Applicant also argues that the combined references of Parker and PR do not teach how access information from one device to another network device on a different domain through an end user device would be carried out. Thus, rather than rely on these arguable references, Examiner has elected to issue new grounds for rejection based on the Microsoft reference (cited below), which clearly presents a system for allowing multi-domain sign on by passing access control information from one domain through a user device to another domain. The claim rejections below describe the reference in more detail.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

1. Claim 34 is rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. The claimed invention merely encompasses a signal. Because a signal is not one of a process, machine, manufacture, or composition of matter, it does not fall within the realm of statutory subject matter.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-5, 7-11, 13-17, 24, 26, and 31-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Microsoft (Single Sign-On in Windows 2000 Networks, from the Microsoft Website, 1998), in view of Gadi (U.S. Patent No. 6,629,246).

In considering claims 1, 24, and 26, Microsoft discloses a method, network device, and computer usable medium for conveying access control information (a.c.i.) from one network device to another network device on a different domain ("domain", "cross-realm referrals in a heterogeneous environment," p. 9, ¶ 3) through an end user device ("User," Fig. 2), comprising:

The one network device ("KDC1") in response to a first message received from the end user device ("TGT1," step 1) containing access control information ("TGT"), sending a response message ("TGT2," step 2) to the end user device ("User")

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containing the a.c.i. ("TGT"), the response message being adapted to cause the end user device to send a second message ("TGT2," step 3) to the another network device ("KDC2") containing at least part of the a.c.i. ("TGT") (see Fig. 2; see also, p. 9, ¶ 3);

Wherein at least part of the a.c.i. is used to control access to a protected resource on the domain associated with at least one of the first and second network devices ("Network Resource").

Note, that in the Microsoft system, the devices controlling access to the resource and the resource are on different computers (i.e. Fig. 2). However, the claim requires that the resource be on the same computer as the computer providing the access information (i.e. "control access to a protected resource on at least one of the first and second network devices"). Nonetheless, it is well known in networking systems for both the resource whose access is being controlled and the device controlling access to the resource to be on the same computer, as evidenced by Gadi. In a similar art, Gadi discloses a single sign-on network system for allowing a remote user to access a resource on a network domain, wherein the access rights are controlled by the same server that stores the resource (col. 6, lines 29-35; col. 7, lines 30-44, wherein the "web server" controls access to a resource which is on the server itself). Such a system is beneficial because it avoids the need for extra network communications between a standalone access server and a resource server. Given this teaching, it would have been obvious to include both the KDC2 functionality and the Network Resource functionality taught by Microsoft in the same computer, to avoid unnecessary network traffic.

In considering claim 2, Microsoft further discloses that the response message contains the a.c.i. ("TGT") and a network device identifier for the another network device ("KDC2"). Parker further discloses that the second message contains at least part of the a.c.i. ("TGT").

However, neither Microsoft nor PR discuss which part of the communication packet (i.e. header or content portion) contains the a.c.i. Nonetheless, Examiner takes official notice that including information in either the header or content portion of a data packet is well known in the art. Thus, storing the a.c.i. in the content portion, as claimed in claim 2, rather than in the header portion, would have been obvious to a person having ordinary skill in the art to simplify header processing of the packet.

In considering claim 3, Microsoft further discloses that the first message has a header portion and a content portion (inherent in any Internet communication system), and further discloses extracting the a.c.i. from the packet for use in the response message (i.e. the access ticket "TGT" is extracted from the response and placed in the response message for delivery to the User).

However, neither Microsoft nor PR discuss which part of the communication packet (i.e. header or content portion) contains the a.c.i. Nonetheless, Examiner takes official notice that including information in either the header or content portion of a data packet is well known in the art. Thus, storing the a.c.i. in the header portion, as claimed

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in claim 3, rather than in the content portion, would have been obvious to a person having ordinary skill in the art to simplify content processing of the packet.

In considering claim 4, Microsoft further discloses that the first message has a header portion and a content portion (inherent in any Internet communication system), and further discloses extracting the a.c.i. from the packet for use in the response message ("TGT" is extracted and used in the response).

However, neither Microsoft nor PR discuss which part of the communication packet (i.e. header or content portion) contains the a.c.i. Nonetheless, Examiner takes official notice that including information in either the header or content portion of a data packet is well known in the art. Thus, storing the a.c.i. in the content portion, as claimed in claim 4, rather than in the header portion, would have been obvious to a person having ordinary skill in the art to simplify header processing of the packet.

In considering claim 5, Microsoft further discloses that hidden content is used in the response message to contain the a.c.i. (the "TGT" is not actually seen by the user).

In considering claim 7, Microsoft further discloses formatting the messages as a custom content type (i.e. Kerberos protocol).

In considering claim 8, Microsoft further discloses that at least part of the response message is protected by cryptographic means ("SSL").

In considering claim 9, Gadi further teaches the use of the single sign-on system for HTTP requests (i.e. Web access). Given this knowledge, it would have been obvious for the messages taught by Microsoft to be HTTP messages, so that the Microsoft system could be used with the majority of Internet applications and documents.

In considering claim 10, Microsoft further discloses that the a.c.i. is a ticket. Although Microsoft does not explicitly use the term "cookie" or describe the use of cookies, the ticket taught by Parker performs the same function as a "cookie" – i.e. it sends authentication information to the server being accessed.

In considering claims 11 and 14, Microsoft further discloses containing user-specific information in the response message together with instructions to include at least part of the user-specific information in the second message (i.e. the "TGT" is user-specific information, and the KDC2 information instructs the User device to send the second message to KDC2.

In considering claim 13, Microsoft further discloses that the one network device is an initial network device accessed by the end user device, the method further comprising:

Prior to sending the response message,

- a. the initial network device receiving an initial access request from the end user device to access a protected resource on the initial network device;
- b. the initial network device performing an authentication process to determine if access should be granted ("authenticates") and if so, responding with an access response message specifying the a.c.i. ("TGT is returned") in association with the domain of the initial network device and causing the end user device to send the first message (p. 2, last paragraph, "user session presents the TGT to the domain controller"); and

On an ongoing basis after performing the authentication process allowing subsequent access to the protected resource to requests containing the access control information (the user will use the TGT for the remainder of the session).

In considering claim 15, Microsoft further discloses that the user specific information comprises at least one of purchase enabling information and personal data ("user ids and passwords," p. 9, ¶ 3).

In considering claim 16, Microsoft further discloses requiring user acceptance before including the at least part of the user-specific information in the second message (i.e. the user must supply a password to begin the session).

In considering claim 17, Microsoft further discloses protecting the a.c.i. information via cryptographic means (SSL).

In considering claim 24, Microsoft further discloses a network device adapted to implement the method of claim 1.

In considering claim 26, Microsoft further discloses a computer usable medium for implementing the method of claim 1.

In considering claims 31, claim 31 is rejected for the same reasons stated with respect to claims 1 and 2 previously.

In considering claims 32-33, claims 32-33 are rejected for the same reasons stated with respect to claim 13.

Claim 34 contains the same limitations as claim 31, and is thus rejected for the same reasons.

Allowable Subject Matter

3. Claims 18-23, 25, and 27-30, and 35 are allowed.

Claims 6, and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

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The following is a statement of reasons for the indication of allowable subject matter: In considering claims 23, 25, 35, 6, and 12, the prior art of record fails to disclose or render obvious all of the limitations of the claim. Claims 27-30 depend from claim 23, and thus are allowable as well.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley Edelman whose telephone number is 571-272-3953. The examiner can normally be reached from 9 a.m. to 5 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glen Burgess can be reached at 571-272-3949. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Bradley Edelman

BE

June 13, 2005